

Lesson 2A Rounding with significant digits.notebook

Rounding *with* Sign. figent Digits

- Locate the digit that needs to be rounded
- If the digit after that digit that needs to be rounded is between 0 and 4, the original digit stays the same (*rounding down*)
- If the digit after the digit that needs to be rounded is between 5 and 9, round the original digit up 1

Example:

- a. 8.347 cm to three significant digits would be 8.35 cm 8.34 cm
- b. 3.81 g to two significant digits would be 3.8 g 3.8 g
- c. 0.0032 kg to 1 significant digit would be 0.003 kg

Round the following according to how many significant digits are stated:

- a) 5.72 to two significant digits $\rightarrow 5.7$
- b) 3.789 to three significant digits $\rightarrow 3.79$
- c) 0.76 to one significant digit $\rightarrow 0.8$
- d) 1602 to 2 significant digits $\rightarrow 1600$, 2002 , 16
- e) 17.98 to 3 significant digits $\rightarrow 18.0$
- f) 957 to 1 significant digit

Classwork/Homework complete sheet of rounding questions

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Review

State the number of significant digits:

- | | |
|-----------|--------------|
| 1. 400 | 6. 0.01005 |
| 2. 1301 | 7. 12.0505 |
| 3. 0.0041 | 8. 2890 |
| 4. 12.60 | 9. 5.06040 |
| 5. 8000.0 | 10. 0.000208 |

Round to the appropriate number of significant digits"

1. 4.584 3 S.d.
2. 0.008274 2 S.D.
3. 1587 2 S.D
4. 1265.403 3 S.D.
5. 0.0002350 2 S.D.
6. 2847 1 S.D.
7. 1.4835 3 S.D.
8. 0.129056 4 S.D.
9. 100.835475 5 S.D.
10. 1579.8 4 S.D.